

Chapter 6

CONTINGENCY PLANNING ISSUES

INTRODUCTION

The *California Energy Shortage Contingency Plan* is activated in the event of a shortage of electrical energy or fuel supplies to protect public health, safety, and welfare (Public Resources Code Section 25700 et seq.). For planning purposes, the Energy Commission considers a shortage to mean an actual or potential loss of supply which significantly impacts the state's energy systems and economy. In a natural disaster, such as earthquake, fire or flood, the Energy Commission works closely with the Governor's Office of Emergency Services (OES) to ensure that fuel supplies for emergency and essential services are available.

Since each energy shortage is unique, it is impossible to envision every event or combination of events which might qualify as an energy emergency. Instead of developing a separate response plan for every type of shortage, one flexible plan has been developed which is designed to work in any emergency. At the heart of the plan is a management structure which identifies the working relationship among people and provides a process to make those relationships work in a crisis. The plan represents a dynamic planning process with the flexibility both to evaluate and define a potential emergency, and to respond adequately to any shortage.

The plan relies on a mixed strategy response to an energy shortage. The plan uses a free market approach with phased government intervention only to the extent necessary to protect the public interest and as appropriate to the severity of the shortage. Activation of specific programs described in the

plan occur only when an energy shortage substantially disrupts California's economy and normal operation.

The Energy Commission's Contingency Planning Unit provides ongoing strategic planning to enhance both the state's energy emergency and overall emergency preparedness. Planning is done in coordination and cooperation with OES, as well as other state, federal, and local agencies. Planning responsibilities include: assistance to local jurisdictions, economic considerations, revisions to the *California Energy Shortage Contingency Plan*, and scenario-based exercises to train Energy Commission staff and evaluate the plan. In the next revision process, the Energy Commission will incorporate the Standardized Emergency Management System (SEMS) into the current management structure. SEMS is a five level, five function organizational framework designed to provide an effective response to a multi-agency, multi-jurisdictional emergency. This management system provides an umbrella under which all response agencies may function in an integrated fashion. SEMS is designed to be flexible and adaptable to the varied disasters that can occur in California. By state law, all state agencies must use SEMS by December 1, 1996, when responding to emergencies involving multiple jurisdictions or agencies.

LOCAL GOVERNMENT ASSISTANCE PROGRAM

The purpose of the Energy Commission's Local Government Assistance Program is to help local

jurisdictions to develop or revise their own local energy shortage response plans, in a manner compatible with OES planning and SEMS. The objective is to enhance a local jurisdiction's capability to manage the impacts of a disruption to the supply and distribution of petroleum, natural gas and electricity. By ensuring that the local jurisdictions are prepared for an energy emergency, the state can ensure a more coordinated and timely statewide response.

The Energy Commission began a program to assist local jurisdictions with energy emergency planning when the **1988 California Energy Shortage Contingency Plan** was adopted. Since at that time many local plans did not address energy shortages or were out of date, the Energy Commission began a local government pilot program. The six pilot counties selected were: Lake, Sacramento, San Bernardino, San Francisco, Tulare, and Ventura.

Working closely with the six pilot counties, the Energy Commission developed the **Handbook for Preparing a Local Energy Shortage Response Plan**. This handbook provides guidelines to assist local governments in developing a customized energy shortage response plan suited to their specific needs. It also identifies the major components of a local plan and includes instructions on how to lay the groundwork and develop the plan, building upon existing resources, authorities and communications systems. The six counties are now better prepared to manage an energy shortage.

The next step in the local government program was providing financial assistance to local governments to develop an energy emergency plan. In December 1992, the Energy Commission awarded a total of \$1,085,000 from the Petroleum Violation Escrow Account to 14 local jurisdictions. The jurisdictions that received grants were: Alameda County, Berkeley, Butte County, Lake County, Los Angeles County Metropolitan Transportation Authority, Mendocino County, City of Sacramento, San Diego County, San Francisco, San Joaquin County, San Luis Obispo County, San Mateo County, Ventura County and Yolo County.

When these grants were completed in the autumn of 1995, an additional 14 jurisdictions were better prepared to respond to an energy shortage. The Energy Commission remains committed to the importance of local energy emergency planning and

will continue to provide technical assistance to each local jurisdiction request.

FINANCIAL INSTRUMENTS

The Energy Commission's **Regional Petroleum Product Reserve Feasibility Study**, completed in 1993, determined that a physical petroleum product reserve in California would not be an economically feasible method of mitigating the effects of price spikes during a supply disruption. An alternative to a physical reserve is the use of financial instruments such as forward, futures and option contracts. These contracts, or "paper reserves," could be used to mitigate price shocks that may accompany a fuel supply disruption. Use of contracts has been developed for the purpose of reducing or eliminating the risk that the price of a commodity will rise before the time of the purchase.

Option contracts have been identified as having the greatest potential benefit for California. The option contract grants the holder of the contract the right, but not the obligation, to purchase or sell a commodity at a specified price on or before a specified date. Options on crude oil and gasoline are traded on the New York Mercantile Exchange and are currently used by several state and municipal government agencies and public utilities throughout the United States.

Although financial instruments could be beneficial in mitigating price shocks, there are limitations in the usefulness when the commodity is simply not available. For example, during a natural disaster such as an earthquake in California, supplies may be temporarily unavailable due to damage to refineries, pipelines, highways and other parts of the distribution system. At such a time, a refiner may be temporarily unable to supply the volume of fuel under contract.

ECONOMIC ASSISTANCE PROGRAM

The Contingency Plan includes an Economic Assistance Program in recognition that during a severe energy supply shortage, when fuel prices may rise sharply, low-income households may be disproportionately impacted. Therefore, the Energy

Commission, in conjunction with the Department of Economic Opportunity (DEO), has developed stand-by options for providing economic assistance for the energy needs of low-income individuals, targeting the working poor.

The stand-by options designate the augmentation of existing economic assistance programs to help with increased transportation, space heating and cooling costs. The two programs designated are the Low-Income Home Energy Assistance Program and the Community Services Block Grant. By augmenting existing programs, the emergency options can use an established network of community-based organizations and eligibility requirements, responding to community-specific needs.

At the time of implementation of stand-by options, an assessment of poverty-related needs and available financial resources, plus a priority list of feasible goals and strategies can be immediately provided by the annual Community Action Plans. These plans, prepared by local antipoverty agencies in each of the 58 counties, also identify minimum requirements and coordination of services to avoid duplication. The programs reflect the principles of self-help and flexibility, with emphasis on local determination of need.

During an emergency, DEO has the ability to respond quickly in providing services, as demonstrated following the Loma Prieta earthquake in 1989 and the Northridge earthquake in 1994. During times of emergency, DEO may implement an emergency policy, waiving some restrictions or requirements to expedite the process. Enacting an emergency policy allows the flexibility to provide: self-certification of eligibility, an increase in the dollar amount allowed per household, and authorization of more energy-related devices.

EMERGENCY RESPONSE

The Contingency Plan is operational and flexible, designed to respond to any energy emergency, whether a man-made or natural disaster. In both types of events, the Energy Commission has a vital emergency response role to coordinate petroleum stocks essential to the relief and aid of the lives and property within the emergency area. The Energy Commission will work with the Office of Emergency Services to prioritize and divert

petroleum supplies into a disaster area or in support of disaster mitigation operations.

As directed, one of the functions of the Energy Commission is to ensure the adequate supply of fuel for public health, safety and welfare. In an emergency, the Energy Commission may use its Petroleum Fuels Set-Aside Program in the Contingency Plan to obtain fuel for emergency responders and essential service providers who are unable to obtain sufficient fuel at any price. The Set-Aside Program has two components: an informal process and a formal program. The informal process is for immediate response to a specific, isolated need, implemented through direct communication with fuel suppliers.

By contrast, the formal Set-Aside Program would respond to a severe, more widespread and prolonged shortage, a measure of last resort. The Energy Commission has developed a computerized application procedure for this formal program. The Energy Commission has made available California's software program and instruction manual to other interested states and the United States Department of Energy. In addition, the Energy Commission has provided training on the use of the program to state counterparts in Nevada and Arizona.

The following examples of responses in the past two years illustrate the use of the plan, and the informal Set-Aside Program, during the two types of emergencies, a natural disaster and a man-made disruption:

- **Natural Disaster (Northridge Earthquake, January 17, 1994):** The Energy Commission provided the Governor with damage assessment to crude oil pipelines, identifying alternate transportation modes for delivery of crude oil to Los Angeles refineries. Using the informal Petroleum Fuels Set-Aside Program, the Energy Commission arranged for diesel delivery to the Thousand Oaks 911 Center. The fuel was essential to operate their back-up generator until electrical service was restored.
- **Man-Made/Regulatory Event (Clean Diesel Transition Problems, October 1, 1993):** The Energy Commission provided the Governor and CARB with refinery production volumes, retail and wholesale price information, and terminal deliveries. The analysis indicated that supplies

were adequate, although there were some minor delays in the distribution system. Using the informal Petroleum Fuels Set-Aside Program, the Energy Commission arranged for the delivery of diesel to the Safeway Distribution Center to ensure critical weekend grocery deliveries.

The Energy Commission has also provided energy impact analyses on numerous other emergency events, such as refinery fires, wildland fires, floods, storm damage of electrical and natural gas systems, and petroleum pipeline breaks.